10/009930

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LOGINID:ssspta1813nxm

## PASSWORD:

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DO YOU WISH TO RESUME THE PREVIOUS SESSION? Y/(N)/?:Y

THE PREVIOUS SESSION IS BEING DISCONNECTED.
PLEASE LOG IN AGAIN TO BE RECONNECTED.
SYSTEM LOGOFF AT 15:52:11 ON 23 JUL 2003 US EASTERN TIME

Connection closed by remote host

A new logon attempt will be made when this window closes. If you chose to RESUME PREVIOUS SESSION, then continue with the logon process as normal. If not, choose Cancel or <ESC> to interrupt the logon process.

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1813nxm

### PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \* SESSION RESUMED IN FILE 'BIOSIS, MEDLINE, AGRICOLA, EMBASE, CABA, WPIDS, JAPIO, BIOTECHDS, LIFESCI, CAPLUS' AT 15:52:35 ON 23 JUL 2003 FILE 'BIOSIS' ENTERED AT 15:52:35 ON 23 JUL 2003 COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC. (R) FILE 'MEDLINE' ENTERED AT 15:52:35 ON 23 JUL 2003 FILE 'AGRICOLA' ENTERED AT 15:52:35 ON 23 JUL 2003 FILE 'EMBASE' ENTERED AT 15:52:35 ON 23 JUL 2003 COPYRIGHT (C) 2003 Elsevier Science B.V. All rights reserved. FILE 'CABA' ENTERED AT 15:52:35 ON 23 JUL 2003 COPYRIGHT (C) 2003 CAB INTERNATIONAL (CABI) FILE 'WPIDS' ENTERED AT 15:52:35 ON 23 JUL 2003 COPYRIGHT (C) 2003 THOMSON DERWENT FILE 'JAPIO' ENTERED AT 15:52:35 ON 23 JUL 2003 COPYRIGHT (C) 2003 Japanese Patent Office (JPO) - JAPIO FILE 'BIOTECHDS' ENTERED AT 15:52:35 ON 23 JUL 2003 COPYRIGHT (C) 2003 THOMSON DERWENT AND INSTITUTE FOR SCIENTIFIC INFORMATION FILE 'LIFESCI' ENTERED AT 15:52:35 ON 23 JUL 2003 COPYRIGHT (C) 2003 Cambridge Scientific Abstracts (CSA) FILE 'CAPLUS' ENTERED AT 15:52:35 ON 23 JUL 2003

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COST IN U.S. DOLLARS

SINCE FILE
ENTRY
FULL ESTIMATED COST

TOTAL
24.38

24.59

1.1

L2

E2

E3

E4

E5

E6

E7

E8

E9

E10

E11

E12

E14

E23

E24

(FILE 'HOME' ENTERED AT 15:41:55 ON 23 JUL 2003) FILE 'BIOSIS, MEDLINE, AGRICOLA, EMBASE, CABA, WPIDS, JAPIO, BIOTECHDS, LIFESCI, CAPLUS' ENTERED AT 15:42:05 ON 23 JUL 2003 E HARDER ACHIM/AU 139 S E3 E VON SAMSON-HIMMELSTJERNA GEORG/AU 2 S E4 => e von samson georg/au VON SAMSON E/AU 34 VON SAMSON G/AU 1 0 --> VON SAMSON GEORG/AU 1 VON SAMSON H/AU VON SAMSON HIMELSTJERNA G/AU 1 VON SAMSON HIMELSTJERNA GEORG/AU 1 1 VON SAMSON HIMMEL ST JERNA G/AU 1 VON SAMSON HIMMELSRJEMA G/AU 1 1 VON SAMSON HIMMELST JERNA G/AU VON SAMSON HIMMELSTJERNA A/AU 101 VON SAMSON HIMMELSTJERNA G/AU 45 VON SAMSON HIMMELSTJERNA GEORG/AU => e VON SAMSON HIMMELSTJERNA H O/AU E13 3 7 VON SAMSON HIMMELSTJERNA M/AU 3 VON SAMSON HIMMELSTJERNA M C/AU E15 4 VON SAMSON HIMMELSTJERNA MATTHIAS/AU E16 1 VON SAMSON HIMMESTJERNA M/AU E17 VON SAMSON HIMMESTJERNA MATTHIAS/AU E18 1 E19 2 VON SAMSON JOERG/AU E20 7 VON SAMSON P/AU 7 VON SAMSON PATRICK/AU E21 1 E22 VON SAMSON V E/AU 2 VON SAMSONHIMMELSTJERNA G/AU VON SAMSONOW ALEXANDER/AU 1 => s e2-e12 149 ("VON SAMSON G"/AU OR "VON SAMSON GEORG"/AU OR "VON SAMSON H"/AU OR "VON SAMSON HIMELSTJERNA G"/AU OR "VON SAMSON HIMELSTJERNA GEORG"/AU OR "VON SAMSON HIMMEL ST JERNA G"/AU OR "VON SAMSON

HIMMELSRJEMA G"/AU OR "VON SAMSON HIMMELST JERNA G"/AU OR "VON SAMSON HIMMELSTJERNA A"/AU OR "VON SAMSON HIMMELSTJERNA G"/AU OR "VON SAMSON HIMMELSTJERNA GEORG"/AU)

=> s e232 "VON SAMSONHIMMELSTJERNA G"/AU L4 => s 11-14 256 (L1 OR L2 OR L3 OR L4) => s 15 and endoparasit? 62 L5 AND ENDOPARASIT? => dup rem 16 PROCESSING COMPLETED FOR L6 55 DUP REM L6 (7 DUPLICATES REMOVED)

=> s 17 and depsideptide L8 0 L7 AND DEPSIDEPTIDE

```
=> s 17 and depsipeptide
            14 L7 AND DEPSIPEPTIDE
=> d bib ab 1-14
L9
     ANSWER 1 OF 14 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AN
     2002-629043 [68]
                       WPIDS
DNC C2002-177712
     Use of depsipeptide for control of endoparasites, e.g.
TТ
     cestodes, trematodes, nematodes or acantocephalans, as solid in specific
     crystal modification.
DC
     B03 C02
IN
     HARDER, A; KALBE, J; TRAEUBEL, M; VON SAMSON-HIMELSTJERNA, G;
     VON SAMSON-HIMMELSTJERNA, G
PΑ
     (FARB) BAYER AG
CYC 100
PΤ
     DE 10104362 A1 20020808 (200268) *
                                               6p
     WO 2002066048 A1 20020829 (200268) DE
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         W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
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            RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM
            ZW
ADT DE 10104362 A1 DE 2001-10104362 20010201; WO 2002066048 A1 WO 2002-EP541
     20020121
PRAI DE 2001-10104362 20010201
     DE 10104362 A UPAB: 20021022
     NOVELTY - Use of a specific depsipeptide (I), as a solid in
     crystal modification I.
          DETAILED DESCRIPTION - Use of a specific depsipeptide of
     formula (I), as a solid in crystal modification I.
          ACTIVITY - Antiparasitic.
          Sheep were infected with 5000 L3 larvae of Haemonchus contortus, then
     treated with 0.1 mg/kg (orally in a gelatine capsule) of (I) as crystal
     modification I.
          Anthelmintic activity, as measured from the number of worm eggs in
     the feces, was over 95%. Similar doses of other crystal modifications were
     less effective with activity 75% or lower.
          MECHANISM OF ACTION - None given in the source material.
          USE - (I) is used for control (treatment or prevention) of
     endoparasites, e.g. cestodes, trematodes, nematodes or
     acantocephalans, in humans and other animals (e.g. mammals, birds, fish,
     reptiles or insects), and is active against all, or individual, stages of
     the life cycle, of normally sensitive or resistant strains.
          ADVANTAGE - Crystal modification I has greater bioavailability, and
     thus activity, than other modifications.
     Dwg.0/0
L9
     ANSWER 2 OF 14 WPIDS COPYRIGHT 2003 THOMSON DERWENT On STN
     2002-076332 [11]
AN
                       WPIDS
DNC C2002-023023
TI
     Article for oral administration of veterinary drugs, especially
     depsipeptide endoparasiticides, comprising
     aroma-containing starch-based extrudate, is readily accepted by animals
     such as dogs.
DC
     B03 C02
TN
     GEISSLER, K; HARDER, A; KALBE, J; TRAEUBEL, M; VON
     SAMSON-HIMMELSTJERNA, G
PΑ
     (FARB) BAYER AG
CYC 97
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PΙ
                   A1 20020103 (200211)*
     DE 10031044
                                              11p
     WO 2002000202 A1 20020103 (200211) DE
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            NL OA PT SD SE SL SZ TR TZ UG ZW
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            DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
            KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU
            SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
     AU 2001079664 A 20020108 (200235)
     NO 2002006209 A 20030123 (200320)
     CZ 2002004141 A3 20030312 (200324)
                  A1 20030402 (200325)
     EP 1296655
                                        DE
         R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
            RO SE SI TR
     BR 2001011914 A 20030513 (200335)
     KR 2003023874 A 20030320 (200346)
    DE 10031044 A1 DE 2000-10031044 20000626; WO 2002000202 A1 WO 2001-EP6836
     20010618; AU 2001079664 A AU 2001-79664 20010618; NO 2002006209 A WO
     2001-EP6836 20010618, NO 2002-6209 20021223; CZ 2002004141 A3 WO
     2001-EP6836 20010618, CZ 2002-4141 20010618; EP 1296655 A1 EP 2001-957856
     20010618, WO 2001-EP6836 20010618; BR 2001011914 A BR 2001-11914 20010618,
     WO 2001-EP6836 20010618; KR 2003023874 A KR 2002-717197 20021217
FDT AU 2001079664 A Based on WO 200200202; CZ 2002004141 A3 Based on WO
     200200202; EP 1296655 A1 Based on WO 200200202; BR 2001011914 A Based on
     WO 200200202
PRAI DE 2000-10031044 20000626
     DE 10031044 A UPAB: 20020215
     NOVELTY - A starch-based extruded shaped article (A) contains special
     aromas, consistency-providing agents and veterinary drugs (I).
          DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for the
     preparation of (A), by mixing the components and further processing at
     temperatures below 150 deg. C.
          USE - (A) is useful for the administration of oral adminstration of
     (I) to animals such as dogs, cats or horses. (I) are specifically cyclic
     depsipeptides (I'), consisting of aminoacid and hydroxycarboxylic acid
     units and having 6-30 ring or chain atoms (claimed). (I') are
     endoparasiticides (for therapeutic or prophylactic use), described
     e.g. in EP382173, DE4317432, DE4317457 and DE4317458.
          ADVANTAGE - (A) is readily accepted by and palatable to animals.
     Addition of meat is unnecesary. (A) is readily prepared by conventional
     extrusion, and provides a simple method of administration of (I).
     Dwg.0/0
L9
     ANSWER 3 OF 14 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
     2001-523377 [58]
AN
                        WPIDS
DNC
    C2001-156416
ТT
     Endoparasiticide composition effective on topical
     administration, comprises solution of depsipeptide in solvent
     such as 1,2-isopropylidene-glycerol.
DC
     B03 C02
     HARDER, A; KALBE, J; MENCKE, N; STEGEMANN, M; TRAEUBEL, M; VON
IN
     SAMSON-HIMMELST JERNA, G; VON SAMSON-HIMMELSTJERNA, G;
     TRAUBEL, M; VON-SAMSON-HIMMELSTJERNA, G
PΑ
     (FARB) BAYER AG; (HARD-I) HARDER A; (KALB-I) KALBE J; (MENC-I) MENCKE N;
     (STEG-I) STEGEMANN M; (TRAU-I) TRAUBEL M; (VONS-I) VON-SAMSON-
     HIMMELSTJERNA G
CYC
PΙ
     DE 10008128
                   A1 20010823 (200158) *
     WO 2001062268 A1 20010830 (200158)
                                         DΕ
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            DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC
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AU 2001040605 A 20010903 (200202) BR 2001008562 A 20021112 (200281) NO 2002003976 A 20021021 (200281) EP 1259250 A1 20021127 (200302) DE R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR CZ 2002002867 A3 20030115 (200309) KR 2002072577 A 20020916 (200311) HU 2002004554 A2 20030528 (200341) CN 1404397 A 20030319 (200344) US 2003125244 A1 20030703 (200345) ADT DE 10008128 A1 DE 2000-10008128 20000222; WO 2001062268 A1 WO 2001-EP1392 20010209; AU 2001040605 A AU 2001-40605 20010209; BR 2001008562 A BR 2001-8562 20010209, WO 2001-EP1392 20010209; NO 2002003976 A WO 2001-EP1392 20010209, NO 2002-3976 20020821; EP 1259250 A1 EP 2001-911623 20010209, WO 2001-EP1392 20010209; CZ 2002002867 A3 WO 2001-EP1392 20010209, CZ 2002-2867 20010209; KR 2002072577 A KR 2002-710032 20020803; HU 2002004554 A2 WO 2001-EP1392 20010209, HU 2002-4554 20010209; CN 1404397 A CN 2001-805400 20010209; US 2003125244 A1 WO 2001-EP1392 20010209, US 2002-204880 20020822 FDT AU 2001040605 A Based on WO 200162268; BR 2001008562 A Based on WO 200162268; EP 1259250 A1 Based on WO 200162268; CZ 2002002867 A3 Based on WO 200162268; HU 2002004554 A2 Based on WO 200162268 PRAI DE 2000-10008128 20000222 DE 10008128 A UPAB: 20011010 NOVELTY - Composition (A) containing a cyclic depsipeptide (I) (optionally together with other active agents) additionally contains at least one solvent (II) and is formulated for topical administration to animals. DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for the preparation of (A), by mixing (I) with (II) and optionally further additives. ACTIVITY - Antiparasitic; anthelmintic. A solution of 5 wt.% depsipeptide (unspecified) in 66.5 wt. % isopropylidene glycerol and 28.5 wt. % benzyl alcohol gave 100% control of Toxocara canis and Ancylostoma caninum in dogs and Toxocara cati in cats within 2-4 days at a depsipeptide dosage of 5 mg/kg. MECHANISM OF ACTION - None given. USE - (A) are used as endoparasiticides (claimed). They are useful for therapeutic or prophylactic control of a broad spectrum of endoparasites (including cestodes, trematodes, nematodes and acanthocephalae) in animals such as cats or dogs. Use in humans is also possible. ADVANTAGE - In the form of (A), (I) are highly effective on topical/transdermal administration in controlling endoparasites in the gastrointestinal tract, despite the fact that molecules (especially peptides) of molecular weight more than 1000 usually show poor skin penetration on topical administration. The preparations (A) also have good long-term stability. Dwg.0/0

LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE

SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

2001-041784 [06] DNC C2001-012205 TISynergistic ectoparasiticide combination for use in human or veterinary medicine, comprising cyclic depsipeptide and piperazine compound as potentiating agent.

DC B03 C02

HARDER, A; SAMSON-HIMMELSTJERNA, G; VON SAMSON-HIMMELSTJERNA, G IN

ANSWER 4 OF 14 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

WPIDS

PA (FARB) BAYER AG

CYC 93

L9

AN

AΒ

```
PΙ
                  A1 20001116 (200106)*
    DE 19921887
    WO 2000069425 A2 20001123 (200106) DE
        RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
           OA PT SD SE SL SZ TZ UG ZW
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           EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK
           LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI
           SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
    AU 2000055237 A 20001205 (200113)
    BR 2000010499 A 20020213 (200220)
    NO 2001005398 A 20011105 (200222)
     SK 2001001626 A3 20020305 (200225)
                 A2 20020327 (200229)
                                        DE
     EP 1189615
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     KR 2001109527 A 20011210 (200237)
     CZ 2001004060 A3 20020612 (200251)
     CN 1352559
                  A 20020605 (200261)
    HU 2002001201 A2 20020828 (200264)
     ZA 2001008238 A 20021224 (200309)
                                              51p
    JP 2002544224 W 20021224 (200313)
                                              46p
ADT DE 19921887 A1 DE 1999-19921887 19990512; WO 2000069425 A2 WO 2000-EP4014
     20000504; AU 2000055237 A AU 2000-55237 20000504; BR 2000010499 A BR
     2000-10499 20000504, WO 2000-EP4014 20000504; NO 2001005398 A WO
     2000-EP4014 20000504, NO 2001-5398 20011105; SK 2001001626 A3 WO
     2000-EP4014 20000504, SK 2001-1626 20000504; EP 1189615 A2 EP 2000-940235
     20000504, WO 2000-EP4014 20000504; KR 2001109527 A KR 2001-713555
     20011023; CZ 2001004060 A3 WO 2000-EP4014 20000504, CZ 2001-4060 20000504;
     CN 1352559 A CN 2000-807450 20000504; HU 2002001201 A2 WO 2000-EP4014
     20000504, HU 2002-1201 20000504; ZA 2001008238 A ZA 2001-8238 20011008; JP
     2002544224 W JP 2000-617884 20000504, WO 2000-EP4014 20000504
FDT AU 2000055237 A Based on WO 200069425; BR 2000010499 A Based on WO
     200069425; SK 2001001626 A3 Based on WO 200069425; EP 1189615 A2 Based on
    WO 200069425; CZ 2001004060 A3 Based on WO 200069425; HU 2002001201 A2
     Based on WO 200069425; JP 2002544224 W Based on WO 200069425
PRAI DE 1999-19921887 19990512
    DE 19921887 A UPAB: 20021105
    NOVELTY - The use of piperazine derivatives (I) is claimed for
    potentiating the endoparasitic activity of cyclic depsipeptides
     (II), consisting of aminoacids and hydroxycarboxylic acids as ring
     components and having 24 ring atoms.
         DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for:
          (i) endoparasitic compositions containing (I) and (II); and
          (ii) the use of (I) together with (II) for the preparation of
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endoparasitic compositions.

ACTIVITY - Anthelmintic.

In tests against Heterakis spumosa in mice, piperazine (Ia) at 4 x 250 mg/kg alone or 'depsipeptide I' (IIa) (see WO9325543) at 4 x1 mg/kg alone gave 50-75% worm reduction, whereas a combination of (Ia) at 4 x 250 mg/kg and (IIa) at 4 x 1 mg/kg gave complete (more than 90%) worm reduction.

MECHANISM OF ACTION - None given.

USE - The combinations of (I) and (II) are useful in human or veterinary medicine for controlling pathogenic endoparasites, specifically cestodes, trematodes, nematodes or acanthocephalae. Activity is demonstrated in tests against Trichinella spiralis in vitro and against Heterakis spumosa or Nematospiroides dibius in mice.

ADVANTAGE - The combination of (I) and (II) (both known ectoparasiticides) has synergistic action, due to potentiation of the activity of (II) by (I). Dwg.0/0

```
WPIDS
AN
     1998-532765 [46]
DNC
    C1998-159906
     New cyclic thio-depsipeptide(s) - useful for controlling
ТT
DC
     B04 C03
     BONSE, G; HARDER, A; JESCHKE, P; LINUMA, K; MENCKE, N; SAKANAKA, O;
IN
     VON SAMSON-HIMMELSTJERNA, G; IINUMA, K; VON SAMSON, G;
     VON SAMSON HIMMELSTJERNA, G; SAMSON-HIMMELSTJERNA, G V
PΑ
     (FARB) BAYER AG; (MEIJ) MEIJI SEIKA KAISHA LTD
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     WO 9843965
                  A1 19981008 (199846)
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            PT SD SE SZ UG ZW
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            GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG
            MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG
            US UZ VN YU ZW
     AU 9870388
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                  A1 20000126 (200010)
     EP 973756
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                  A 20000705 (200052)
     NZ 338102
                  A 20010223 (200115)
                 B 20010405 (200125)
     AU 731789
     KR 2000076392 A 20001226 (200134)
                  B1 20010724 (200146)
     US 6265537
     JP 2001524952 W 20011204 (200203)
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     EP 973756
                  B1 20030326 (200323)
                                         DE
         R: CH DE ES FR GB IT LI NL
     DE 59807652
                  G 20030430 (200330)
ADT
    DE 19713626 A1 DE 1997-19713626 19970402; WO 9843965 A1 WO 1998-EP1628
     19980320; AU 9870388 A AU 1998-70388 19980320; EP 973756 A1 EP 1998-917025
     19980320, WO 1998-EP1628 19980320; CN 1259128 A CN 1998-805729 19980320;
     NZ 338102 A NZ 1998-338102 19980320, WO 1998-EP1628 19980320; AU 731789 B
     AU 1998-70388 19980320; KR 2000076392 A WO 1998-EP1628 19980320, KR
     1999-708495 19990917; US 6265537 B1 WO 1998-EP1628 19980320, US
     1999-381946 19990927; JP 2001524952 W JP 1998-541108 19980320, WO
     1998-EP1628 19980320; EP 973756 B1 EP 1998-917025 19980320, WO 1998-EP1628
     19980320; DE 59807652 G DE 1998-507652 19980320, EP 1998-917025 19980320,
     WO 1998-EP1628 19980320
    AU 9870388 A Based on WO 9843965; EP 973756 A1 Based on WO 9843965; NZ
     338102 A Based on WO 9843965; AU 731789 B Previous Publ. AU 9870388, Based
     on WO 9843965; KR 2000076392 A Based on WO 9843965; US 6265537 B1 Based on
     WO 9843965; JP 2001524952 W Based on WO 9843965; EP 973756 B1 Based on WO
     9843965; DE 59807652 G Based on EP 973756, Based on WO 9843965
PRAI DE 1997-19713626 19970402
        19713626 A UPAB: 19981118
     Cyclic thiodepsipeptides of formula (I), their optical isomers and
     racemates are new: where R1, R4, R7 and R10 = H or 1-4C alkyl; R2, R5, R8,
     R11 = H or optionally substituted 1-8C alkyl, 2-8C alkenyl, 3-6C
     cycloalkyl, (3-6C)cycloalkyl-(1-2C)alkyl, aryl-(1-2C)alkyl,
     heteroaryl-(1-2C)alkyl, aryl or heteroaryl; or R10+R11 complete a 5- or
     6-membered ring that is optionally interrupted by O, S, SO or SO2 and
     optionally substituted; R3, R9 = H, 1-8C alkyl, aryl-(1-2C)alkyl or
     (3-6C)cycloalkyl-(1-2C)alkyl; R6, R12 = H or optionally substituted 1-8C
     alkyl, 2-8C alkenyl, 3-6C cycloalkyl, (3-6C)cycloalkyl-(1-2C)alkyl,
     aryl-(1-2C)alkyl, heteroaryl-(1-2C)alkyl, aryl or heteroaryl; X1-X4 = 0 or
     S, at least one being S.
          USE - for controlling endoparasites that infest humans and
     other animals, including cestodes, trematodes, nematodes and
     acanthocephalids.
```

Dwg.0/0

```
1999:819404 CAPLUS
AN
     132:36040
DN
    Synthesis of sulfonyl-substituted cyclooctadepsipeptides for use in
TI
     combating endoparasites
IN
     Scherkenbeck, Jurgen; Dyker, Hubert; Plant, Andrew; Harder, Achim
     ; Von Samson Himmelstjerna, Georg
PA
     Bayer A.-G., Germany
SO
     PCT Int. Appl., 31 pp.
     CODEN: PIXXD2
DT
    Patent
LΑ
    German
FAN.CNT 1
     PATENT NO.
                KIND DATE
                                       APPLICATION NO. DATE
     ______
                                        ______
                    A1 19991229 WO 1999-EP4028 19990611
    WO 9967281
PΙ
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            JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
            MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
            TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
            MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
            ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
            CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                       DE 1998-19828047 19980624
    DE 19828047
                    A1
                          19991230
                                        CA 1999-2332122 19990611
     CA 2332122
                     AA
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                     A1
    AU 9945114
                          20000110
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A1
                          20010320 BR 1999-11574 19990611
20010411 EP 1999-927953 19990611
    BR 9911574
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        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI
     JP 2002518520 T2 20020625 JP 2000-555932 19990611
PRAI DE 1998-19828047 A
                          19980624
    WO 1999-EP4028 W
                         19990611
OS
    MARPAT 132:36040
AΒ
    The invention relates to new substituted cyclooctadepsipeptides [(I); R,
    R1 = SO2-A in 2- or 4-position; A = NR2R3; R2, R3 = (independently) H,
     (substituted)alkyl; m = 1 - 2; n = 0 - 2], a method for their prepn. and
     their use for fighting endoparasites, as well as drugs contg.
     them as active ingredients. Thus, depsipeptide PF 1022 was
     reacted with chlorosulfonic acid, and the product further reacted with
     substituted amines (no data), to give the desired products. In in vivo
     tests using sheep infected with H. contortus, eight test compds. all
     resulted in >95% redn. of infection at 0.05 mg/kg p.o.; against T.
     colubriformis, four test compds. resulted in >95% redn. of infection at
     0.25 mg/kg p.o.
RE.CNT 3
             THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L9
    ANSWER 7 OF 14 CAPLUS COPYRIGHT 2003 ACS on STN
ΑN
     1997:51502 CAPLUS
DN
    126:84585
ΤI
    Endoparasitic drug combination
ΙN
    Mencke, Norbert; Harder, Achim; Jeschke, Peter; Helpap, Barbara
PA
    Bayer A.-G., Germany
    Ger. Offen., 17 pp.
SO
    CODEN: GWXXBX
DT
    Patent
LΑ
    German
FAN.CNT 1
                                  APPLICATION NO. DATE
    PATENT NO. KIND DATE
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PΙ
    DE 19520275 A1 19961205 DE 1995-19520275 19950602
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ANSWER 6 OF 14 CAPLUS COPYRIGHT 2003 ACS on STN

L9

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TW 1996-85105513 19960510
     TW 469133
                      В
                           20011221
                                          CA 1996-2222680 19960520
     CA 2222680
                      AA
                           19961205
                                          WO 1996-EP2170
    WO 9638165
                      A2
                           19961205
                                                           19960520
    WO 9638165
                      Α3
                           19970109
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            PL, RO, RU, SK, TR, UA, US
        RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
            SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
                           19961218
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    AU 9659004
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    AU 703048
                      B2
                           19990311
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                      A2
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     EP 828506
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    NO 9705516
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PRAI DE 1995-19520275 A
                           19950602
    WO 1996-EP2170
                      W
                           19960520
OS
    MARPAT 126:84585
    A combination of a macrocyclic lactone (avermectin, ivermectin, or
AΒ
     milbemycin) with a cyclic depsipeptide, optionally including
     praziquantel or epsiprantel, is useful as a synergistic nematocide for
     treatment of ascarid, hookworm, trichurid, and filarial infestations in
     mammals. Thus, a combination of PF 1022A (cyclic depsipeptide)
     50.0 and ivermectin Bla/Blb 0.1 mg/kg orally was 100% effective against
     Nematospiroides dubius infestation in mice.
L9
    ANSWER 8 OF 14 CAPLUS COPYRIGHT 2003 ACS on STN
ΑN
     1996:379698 CAPLUS
DN
     125:59134
ΤI
    Aromatic sulfonylation, sulfenylation, thiocyanation, and phosphorylation
     of cyclic depsipeptides in preparation of endoparasiticides.
ΙN
     Scherkenbeck, Juergen; Plant, Andrew; Jeschke, Peter; Harder,
     Achim; Mencke, Norbert
PA
    Bayer A.-G., Germany
     Ger. Offen., 15 pp.
SO
     CODEN: GWXXBX
DT
     Patent
LA
    German
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO.
                                                          DATE
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    DE 4437198
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                                          DE 1994-4437198 19941018
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                                          CA 1995-2202751 19951005
     WO 9611945
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                                          WO 1995-EP3926
                                                           19951005
        W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, HU, JP, KR, KZ, LK, MX, NO,
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        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
            BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
    AU 9538038
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     EP 787141
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                           19970806
                                          EP 1995-935902
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     EP 787141
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        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE
     CN 1162961
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                                                           19951005
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A2 19980302
                                           HU 1997-2045
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T2 19981104
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A 19990223
                                           ES 1995-935902
     ES 2149378
                                                            19951005
     US 5874530
                                           US 1997-817279
                                                            19970410
     FI 9701610
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                           19970416
                                           FI 1997-1610
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PRAI DE 1994-4437198 A
                           19941018
    WO 1995-EP3926
                      W
                           19951005
OS
     MARPAT 125:59134
     Title processes are carried out on cyclic depsipeptides prepd. from
AB
     .alpha.-hydroxycarboxylic acids and .alpha.-amino acids and contg. 6-24
     ring atoms and .gtoreq.1 Ph ring using the appropriate reagents,
     optionally in the presence of catalysts, additives, and/or diluents.
     Cyclic depsipeptides [I; .gtoreq.1 of R3-R10 = sulfonylated, sulfenylated,
     thiocyanated, or phosphorylated Ph, PhCH2; R1, R2, R11, R12 = H,
     (substituted) alkyl, cycloalkyl, aralkyl, aryl; R3, R5, R7, R9 = H,
     (substituted) alkyl; R4, R6, R8, R10 = H, (substituted) alkyl, alkenyl,
     cycloalkyl, aryl, aralkyl], useful as endoparasiticides, are
     claimed. I (R1, R2, R5, R9, R11, R12 = Me; R4, R6, R8, R10 = CH2CHMe2;
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- ANSWER 9 OF 14 CAPLUS COPYRIGHT 2003 ACS on STN L9
- 1995:951170 CAPLUS AN

in sheep at 0.5 mg/kg.

- DN124:9453
- TIPreparation of cyclic depsipeptides as endoparasiticides
- ΙN Scherkenbeck, Juergen; Jeschke, Peter; Plant, Andrew; Harder, Achim; Mencke, Norbert

R3, R7 = morpholine-4-sulfonyl) was effective against Hemonchus contortus

- PΑ Bayer A.-G., Germany
- SO Ger. Offen., 31 pp. CODEN: GWXXBX
- DT Patent
- German LΑ
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO. DATE	
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ΡI	DE 4401389	A1	19950720	DE 1994-4401389 19940119	9
	EP 664297	A1	19950726	EP 1995-100198 19950109	9
	EP 664297	B1	19980408		
	ES 2115269	Т3	19980616	ES 1995-100198 19950109	9
	JP 07206897	A2	19950808	JP 1995-21325 19950113	3
	US 5663140	Α	19970902	US 1995-372543 19950113	3
PRAI	DE 1994-4401389		19940119		
OS	MARPAT 124:9453				

- Title compds. [I; R1,R4 = H, (cyclo)alkyl, (hetero)aryl(alkyl), etc.; AB R2,R3,R5,R6 = H, (un)substituted alkyl, alkenyl, (hetero)aryl(alkyl), etc.] were prepd. Thus, prepd. I (R1 = R3 = R4 = R6 = Me, R2 = R5 = CMe3) had ED of 10mg/kg orally and/or i.v. against Haemonchus contortus in sheep.
- L9 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2003 ACS on STN
- AN1995:913288 CAPLUS
- DN 123:340963
- TIPreparation of cyclic depsipeptides having 18 ring atoms as endoparasiticides.
- INJeschke, Peter; Scherkenbeck, Juergen; Bonse, Gerhard; Bischoff, Erwin; Mencke, Norbert; Harder, Achim; Londershausen, Michael; Mueller, Hartwig
- PΑ Bayer A.-G., Germany
- Eur. Pat. Appl., 42 pp. SO CODEN: EPXXDW
- DTPatent

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German
FAN.CNT 1
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                   KIND DATE
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    EP 658551 A1 19950621
EP 658551 B1 19990519
                                         EP 1994-119130 19941205
PΙ
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE
     DE 4342907 A1 19950622
AT 180254 E 19990615
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    AT 180254
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     ES 2133153
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    JP 07196687 A2 19950801
US 5624897 A 19970429
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                                          ZA 1994-10011
                                                          19941215
PRAI DE 1993-4342907
                          19931216
     CASREACT 123:340963; MARPAT 123:340963
OS
AB
     Title compds. [I; R = H, (cyclo)alkyl], were prepd. Thus,
     N-methylalanyl-D-lactyl-N-methylisoleucyl-D-lactyl-N-methylleucyl-D-lactic
     acid (prepn. given) was stirred with (Me2CH) 2NEt and bis(2-oxo-3-
     oxazolidinyl) phosphonic acid chloride in CH2Cl2 at 0.degree. to room temp.
     to give 59.8% title compd. (II). II was effective against
     Trichostrongylus colubriformis and Haemonchus contortus in sheep at 10
     mg/kg orally or i.v.
    ANSWER 11 OF 14 CAPLUS COPYRIGHT 2003 ACS on STN
L9
     1995:813210 CAPLUS
AN
DN
     124:53819
ΤI
     Cyclic depsipeptides containing lactic acid with 18 ring atoms as
     endoparasiticidal agents and process for their preparation
IN
     Jeschke, Peter; Harder, Achim; Mencke, Norbert; Kleinkauf,
     Horst; Zocher, Rainer
PA
     Bayer A.-G., Germany
SO
    Eur. Pat. Appl., 15 pp.
     CODEN: EPXXDW
DT
    Patent
LΑ
    German
FAN.CNT 1
    PATENT NO.
                   KIND DATE
                                     APPLICATION NO. DATE
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    EP 669343 A1 19950830 EP 669343 B1 20030115
PΙ
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        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE
    DE 4406025 A1 19950831 DE 1994-4406025 19940224
AT 231164 E 20030215 AT 1995-101909 19950213
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                     T3 20030501
    ES 2185671
                                          ES 1995-101909
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                    A 19970812
AA 19950825
A1 19950831
    US 5656464
                                          US 1995-390326
                                                           19950217
                                          CA 1995-2143045 19950221
    CA 2143045
    AU 9512387
                                          AU 1995-12387
                                                           19950221
    AU 689179 B2 19980326
JP 07252297 A2 19951003
FI 9500823 A 19950825
                                          JP 1995-55279
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                                          FI 1995-823
                                                           19950222
                  A 19950825
B1 20001229
A 19951024
    NO 9500669
                                        NO 1995-669
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    PL 180162
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                     A2 19960429
    HU 72399
                                         HU 1995-555
                                                           19950223
    HU 219830
                     B 20010828
    CZ 287506 B6 20001213
US 5945316 A 19990831
                                          CZ 1995-482
                                                          19950223
                                          US 1997-821633 19970320
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PRAI DE 1994-4406025 A 19940224

A3 19950217 US 1995-390326 MARPAT 124:53819 A process for the prodn. of optically active cyclic depsipeptides with 18 ring atoms by use of fungi of the genus Fusarium or their isolated enzyme prepns. is claimed. ANSWER 12 OF 14 CAPLUS COPYRIGHT 2003 ACS on STN 1995:763739 CAPLUS 123:179457 Endoparasiticidal agents containing praziquantel or epsiprantel and cyclic depsipeptides Mencke, Norbert; Harder, Achim; Jeschke, Peter Bayer A.-G., Germany Eur. Pat. Appl., 39 pp. CODEN: EPXXDW Patent German FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE \_ \_ \_ \_ -----\_\_\_\_\_\_ EP 1994-120772 EP 662326 A2 19950712 19941227 19971217 EP 662326 A3 В1 EP 662326 20011128 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE DE 4400464 A1 19950713 DE 1994-4400464 19940111 AU 9481592 A1 19950720 AU 1994-81592 19941220 AU 685535 B2 19980122 Ε AT 1994-120772 19941227 AT 209501 20011215 Т3 20020616 ES 2168285 ES 1994-120772 19941227 A US 5589503 19961231 US 1995-368515 19950104 FI 9500091 Α 19950712 FI 1995-91 19950109 A2 JP 07223951 19950822 JP 1995-16335 19950109 IL 112285 A1 19990620 IL 1995-112285 19950109 B1 PL 180019 20001229 PL 1995-306709 19950109 NO 1995-93 NO 9500093 Α 19950712 19950110 HU 69180 A2 19950828 HU 1995-65 19950110 ZA 9500136 Α 19950907 ZA 1995-136 19950110 CZ 290246 B6 20020612 CZ 1995-61 19950110

PRAI DE 1994-4400464 A MARPAT 123:179457 OS

CN 1121429

RU 2124364

OS

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L9

ΑN

DN

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SO

DT

T.A

PΙ

AB Praziquantel and epsiprantel enhance the endoparasiticidal action of cyclic depsipeptides. Thus, a 1:1 combination of praziquantel and cyclo(N-methyl-L-leucyl-D-lactoyl-N-methyl-L-leucyl-D-.beta.phenyllactoyl-N-methyl-L-leucyl-D-lactoyl-N-methyl-L-leucyl-D-.beta.phenyllactoyl) (PF 1022) was 100% effective against exptl. infestation with Ancylostoma caninum in dogs. Syntheses of cyclic depsipeptides with 18 and 24 ring atoms and their linear precursors is described.

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L9
    ANSWER 13 OF 14 CAPLUS COPYRIGHT 2003 ACS on STN
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A

C1

- AN 1995:374823 CAPLUS
- DN 122:160697
- TI Preparation of octacyclodepsipeptides as endoparasiticides

19960501

19990110

19940111

- IN Scherkenbeck, Juergen; Jeschke, Peter; Lerchen, Hans-Georg; Hagemann, Hermann; Harder, Achim; Mencke, Norbert; Plant, Andrew
- PΑ Bayer A.-G., Germany
- SO Eur. Pat. Appl., 46 pp.
- CODEN: EPXXDW
- DTPatent
- LΑ German
- FAN.CNT 1

CN 1995-101158

RU 1995-100759

19950111

19950111

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     EP 626375
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ΡI
                           19941130
                                                          19940516
                     A1
     EP 626375
                     B1
                           20020605
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, SE
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                                         DE 1993-4317457 19930526
                     A1
    AU 9460642
                                         AU 1994-60642
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    AU 682847
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    AT 218555
                      E
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                                         AT 1994-107543
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    ES 2177555
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                          19950126
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                           19980707
                                         US 1995-510084
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PRAI DE 1993-4317457
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    US 1994-246029
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                           19940519
OS
    MARPAT 122:160697
AB
    Title compds. [I; R1, R2, R11, R12 = (cyclo)alkyl, haloalkyl, aryl(alkyl);
    R3,R5,R7,R9 = H, alkyl, aryl(alkyl), etc.; R4, R6, R8, R10 = H, alk(en)yl,
     aryl(alkyl), etc.] were prepd. Thus, I (R1 = R2 = R5 = R9 = R11 = R12 =
    Me, R3 = R7 = CH2Ph, R4 = R6 = R8 = R10 = CHMe2) gave complete control of
    Haemonchus contortus in sheep at 5mg/kg orally.
    ANSWER 14 OF 14 CAPLUS COPYRIGHT 2003 ACS on STN
L9
ΑN
     1994:606025 CAPLUS
DN
     121:206025
     Preparation of cyclic depsipeptides with 18 ring atoms as
TI
     endoparasiticides.
    Jeschke, Peter; Scherkenbeck, Juergen; Bonse, Gerhard; Mencke, Norbert;
IN
    Harder, Achim; Londershausen, Michael; Bischoff, Erwin; Mueller,
    Hartwig; Kurka, Peter
PA
    Bayer A.-G., Germany
SO
    Ger. Offen., 49 pp.
    CODEN: GWXXBX
DT
    Patent
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    German
FAN.CNT 1
                    KIND DATE
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ΡI
    DE 4317458
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    WO 9325543
                     A2
                           19931223
                                         WO 1993-EP1436
                                                          19930607
    WO 9325543
                     A3
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        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
    AU 9343236
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    EP 644883
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                           19950329
                                         EP 1993-912908
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    CZ 286108
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                                         CZ 1994-3106
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    JP 3299752
                                         JP 1994-501102
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    US 5821222
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                          19981013
                                         US 1996-728106
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PRAI DE 1992-4219157 A1 19920611
    DE 1993-4317458 A
                          19930526
    WO 1993-EP1436
                     A
                           19930607
    US 1994-343517
                     B1 19941205
OS
    MARPAT 121:206025
AB
    Title compds. [I; R1, R3, R5 = alkyl, hydroxyalkyl, alkoxyalkyl,
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mercaptoalkyl, alkylsulfinylalkyl, aminoalkyl, carbamoylalkyl,

guanidinoalkyl, alkenyl, cycloalkyl, (substituted) arylalkyl, etc.; R2, R4, R6 = alkyl, hydroxyalkyl, alkanoyloxyalkyl, alkoxyalkyl, aryloxyalkyl, alkylthioalkyl, carbamoylalkyl, aminoalkylsulfonyl, alkoxycarbonylaminoalkyl, alkenyl, cycloalkyl, (substituted) aryl, arylalkyl, etc.], were prepd. Thus, Z-MeIle-D-Lac-OH (MeIle = N-methylisoleucyl, Lac = lactyl) was coupled with H-(MeIle-D-Lac)20Bu-t in CH2Cl2 using (Me2CH) 2NEt/BOP-Cl to give 77.4% Z-(MeIle-D-Lac) 30Bu-t, which was O-deprotected with HCl in CH2Cl2 (82.9%) followed by coupling with pentafluorophenol using DCC in EtOAc to give 54% Z-(MeIle-D-Lac)30Pfp. This in dioxane was added over 6 h to a mixt. of Pd/C, 4-pyrrolidinopyridine, and EtOH in dioxane at 95.degree. under H to give 36.8% title compd. II. II was effective against Haemonchus contortus in sheep at 5 mg/kg. (FILE 'HOME' ENTERED AT 15:41:55 ON 23 JUL 2003) FILE 'BIOSIS, MEDLINE, AGRICOLA, EMBASE, CABA, WPIDS, JAPIO, BIOTECHDS,

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                E HARDER ACHIM/AU
            139 S E3
L1
                E VON SAMSON-HIMMELSTJERNA GEORG/AU
L2
              2 S E4
                E VON SAMSON GEORG/AU
L3
            149 S E2-E12
              2 S E23
L4
            256 S L1-L4
L5
L6
             62 S L5 AND ENDOPARASIT?
L7
             55 DUP REM L6 (7 DUPLICATES REMOVED)
             0 S L7 AND DEPSIDEPTIDE
L8
             14 S L7 AND DEPSIPEPTIDE
T.9
=> s 17 and piperazine
L10
             1 L7 AND PIPERAZINE
=> d bib ab
L10 ANSWER 1 OF 1 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AΝ
     2001-041784 [06]
                        WPIDS
DNC C2001-012205
ΤI
     Synergistic ectoparasiticide combination for use in human or veterinary
     medicine, comprising cyclic depsipeptide and piperazine compound
     as potentiating agent.
DC
     B03 C02
IN
     HARDER, A; SAMSON-HIMMELSTJERNA, G; VON SAMSON-HIMMELSTJERNA, G
PA
     (FARB) BAYER AG
CYC
    93
PΙ
     DE 19921887 A1 20001116 (200106)*
                                              15p
     WO 2000069425 A2 20001123 (200106) DE
        RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
            OA PT SD SE SL SZ TZ UG ZW
         W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ
            EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK
            LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI
            SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
     AU 2000055237 A 20001205 (200113)
     BR 2000010499 A 20020213 (200220)
     NO 2001005398 A 20011105 (200222)
     SK 2001001626 A3 20020305 (200225)
     EP 1189615
                  A2 20020327 (200229) DE
         R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
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RO SE SI KR 2001109527 A 20011210 (200237) CZ 2001004060 A3 20020612 (200251) A 20020605 (200261) CN 1352559 HU 2002001201 A2 20020828 (200264) ZA 2001008238 A 20021224 (200309) JP 2002544224 W 20021224 (200313) 51p 46p ADT DE 19921887 A1 DE 1999-19921887 19990512; WO 2000069425 A2 WO 2000-EP4014 20000504; AU 2000055237 A AU 2000-55237 20000504; BR 2000010499 A BR 2000-10499 20000504, WO 2000-EP4014 20000504; NO 2001005398 A WO 2000-EP4014 20000504, NO 2001-5398 20011105; SK 2001001626 A3 WO 2000-EP4014 20000504, SK 2001-1626 20000504; EP 1189615 A2 EP 2000-940235 20000504, WO 2000-EP4014 20000504; KR 2001109527 A KR 2001-713555 20011023; CZ 2001004060 A3 WO 2000-EP4014 20000504, CZ 2001-4060 20000504; CN 1352559 A CN 2000-807450 20000504; HU 2002001201 A2 WO 2000-EP4014 20000504, HU 2002-1201 20000504; ZA 2001008238 A ZA 2001-8238 20011008; JP 2002544224 W JP 2000-617884 20000504, WO 2000-EP4014 20000504 FDT AU 2000055237 A Based on WO 200069425; BR 2000010499 A Based on WO 200069425; SK 2001001626 A3 Based on WO 200069425; EP 1189615 A2 Based on WO 200069425; CZ 2001004060 A3 Based on WO 200069425; HU 2002001201 A2 Based on WO 200069425; JP 2002544224 W Based on WO 200069425 PRAI DE 1999-19921887 19990512 DE 19921887 A UPAB: 20021105 NOVELTY - The use of piperazine derivatives (I) is claimed for potentiating the endoparasitic activity of cyclic depsipeptides (II), consisting of aminoacids and hydroxycarboxylic acids as ring components and having 24 ring atoms. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for: (i) endoparasitic compositions containing (I) and (II); and (ii) the use of (I) together with (II) for the preparation of endoparasitic compositions. ACTIVITY - Anthelmintic. In tests against Heterakis spumosa in mice, piperazine (Ia) at 4 x 250 mg/kg alone or 'depsipeptide I' (IIa) (see WO9325543) at 4 x 1 mg/kg alone gave 50-75% worm reduction, whereas a combination of (Ia) at 4 x 250 mg/kg and (IIa) at 4 x 1 mg/kg gave complete (more than 90%) worm reduction. MECHANISM OF ACTION - None given. USE - The combinations of (I) and (II) are useful in human or veterinary medicine for controlling pathogenic endoparasites, specifically cestodes, trematodes, nematodes or acanthocephalae. Activity is demonstrated in tests against Trichinella spiralis in vitro and against Heterakis spumosa or Nematospiroides dibius in mice. ADVANTAGE - The combination of (I) and (II) (both known ectoparasiticides) has synergistic action, due to potentiation of the activity of (II) by (I). Dwq.0/0 => s depsipeptide and piperazine 6 FILES SEARCHED... L1111 DEPSIPEPTIDE AND PIPERAZINE => dup rem 111 PROCESSING COMPLETED FOR L11 L127 DUP REM L11 (4 DUPLICATES REMOVED) => d bib ab 1-7 L12 ANSWER 1 OF 7 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN

Isolation of a novel cyclic hexadepsipeptide pipalamycin from Streptomyces

AN

ΤI

2002064650 EMBASE

as an apoptosis-inducing agent.

- AU Uchihata Y.; Ando N.; Ikeda Y.; Kondo S.; Hamada M.; Umezawa K.
- CS K. Umezawa, Department of Applied Chemistry, Faculty of Science and Technology, Keio University, 3-14-1 Hiyoshi, Kohoku-ku, Yokohama 223-0061, Japan. umezawa@applc.keio.ac.jp
- SO Journal of Antibiotics, (2002) 55/1 (1-5).

Refs: 7

ISSN: 0021-8820 CODEN: JANTAJ

CY Japan

DT Journal; Article

FS 004 Microbiology

016 Cancer

030 Pharmacology

037 Drug Literature Index

- LA English
- SL English
- AB The novel cyclic hexadepsipeptide named pipalamycin was isolated from a culture filtrate of Streptomyces sp. ML297-90F8 as an apoptosis-inducing agent. The antibiotic was found to be consisting of each one mole of alanine, N-hydroxyalanine, glycine, N-acylated 3-hydroxyleucine, and two moles of piperazic acid. Pipalamycin induced apoptosis in apoptosis-resistant human pancreatic adenocarcinoma AsPC-1 cells at 0.3 .mu.g/ml in 24-48 hours. It also showed antibacterial activity on Gram-positive bacteria such as Staphylococcus aureus and Micrococcus luteus. Fermentation, isolation, structural elucidation and the biological activities of pipalamycin are described.
- L12 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2001:104442 CAPLUS
- DN 134:266216
- TI Morpholine-2,5-diones their preparation and uses
- AU Vinsova, Jarmila
- CS Fac. Pharmacy, Charles Univ., Hradec Kralove, 500 05, Czech Rep.
- SO Chemicke Listy (2001), 95(1), 22-27 CODEN: CHLSAC; ISSN: 0009-2770
- PB Ceska Spolecnost Chemicka
- DT Journal; General Review
- LA Czech
- AB Morpholine-2,5-diones are depsipeptide analogs of cyclic dipeptides, derivs. of piperazine-2,5-diones. In contrast to cyclodipeptides, which are formed by spontaneous cyclization, prepn. of cyclodidepsipeptides is not easy. Two main ways are used for cyclization of depsipeptides. Cyclization by the formation of ester bond seems more efficient than cyclization via the amide bond formation. The review with 51 refs. deals briefly with all known methods of syntheses of morpholine-2,5-diones but attention is also paid to their biol. activity. They are of great interest for biomedical applications. Optically active morpholine-2,5-diones are used as monomers for synthesis of biodegradable polymers, as prodrugs of bioactive amino acids and, most recently, in drug delivery systems.
- L12 ANSWER 3 OF 7 WPIDS COPYRIGHT 2003 THOMSON DERWENT ON STNDUPLICATE 1
- AN 2001-041784 [06] WPIDS
- DNC C2001-012205
- TI Synergistic ectoparasiticide combination for use in human or veterinary medicine, comprising cyclic **depsipeptide** and **piperazine** compound as potentiating agent.
- DC B03 C02
- IN HARDER, A; SAMSON-HIMMELSTJERNA, G; VON SAMSON-HIMMELSTJERNA, G
- PA (FARB) BAYER AG
- CYC 93
- PI DE 19921887 A1 20001116 (200106)\* 15p
  - WO 2000069425 A2 20001123 (200106) DE
    - RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL

OA PT SD SE SL SZ TZ UG ZW W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW AU 2000055237 A 20001205 (200113) BR 2000010499 A 20020213 (200220) NO 2001005398 A 20011105 (200222) SK 2001001626 A3 20020305 (200225) EP 1189615 A2 20020327 (200229) DE R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI KR 2001109527 A 20011210 (200237) CZ 2001004060 A3 20020612 (200251) CN 1352559 A 20020605 (200261) HU 2002001201 A2 20020828 (200264) ZA 2001008238 A 20021224 (200309) 51p JP 2002544224 W 20021224 (200313) 46p ADT DE 19921887 A1 DE 1999-19921887 19990512; WO 2000069425 A2 WO 2000-EP4014 20000504; AU 2000055237 A AU 2000-55237 20000504; BR 2000010499 A BR 2000-10499 20000504, WO 2000-EP4014 20000504; NO 2001005398 A WO 2000-EP4014 20000504, NO 2001-5398 20011105; SK 2001001626 A3 WO 2000-EP4014 20000504, SK 2001-1626 20000504; EP 1189615 A2 EP 2000-940235 20000504, WO 2000-EP4014 20000504; KR 2001109527 A KR 2001-713555 20011023; CZ 2001004060 A3 WO 2000-EP4014 20000504, CZ 2001-4060 20000504; CN 1352559 A CN 2000-807450 20000504; HU 2002001201 A2 WO 2000-EP4014 20000504, HU 2002-1201 20000504; ZA 2001008238 A ZA 2001-8238 20011008; JP 2002544224 W JP 2000-617884 20000504, WO 2000-EP4014 20000504 FDT AU 2000055237 A Based on WO 200069425; BR 2000010499 A Based on WO 200069425; SK 2001001626 A3 Based on WO 200069425; EP 1189615 A2 Based on WO 200069425; CZ 2001004060 A3 Based on WO 200069425; HU 2002001201 A2 Based on WO 200069425; JP 2002544224 W Based on WO 200069425 PRAI DE 1999-19921887 19990512 DE 19921887 A UPAB: 20021105 NOVELTY - The use of piperazine derivatives (I) is claimed for potentiating the endoparasitic activity of cyclic depsipeptides (II), consisting of aminoacids and hydroxycarboxylic acids as ring components and having 24 ring atoms. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for: (i) endoparasitic compositions containing (I) and (II); and (ii) the use of (I) together with (II) for the preparation of endoparasitic compositions. ACTIVITY - Anthelmintic. In tests against Heterakis spumosa in mice, piperazine (Ia) at 4 x 250 mg/kg alone or 'depsipeptide I' (IIa) (see WO9325543) at 4 x 1 mg/kg alone gave 50-75% worm reduction, whereas a combination of (Ia) at 4 x 250 mg/kg and (IIa) at 4 x 1 mg/kg gave complete (more than 90%) worm reduction. MECHANISM OF ACTION - None given. USE - The combinations of (I) and (II) are useful in human or veterinary medicine for controlling pathogenic endoparasites, specifically cestodes, trematodes, nematodes or acanthocephalae. Activity is demonstrated in tests against Trichinella spiralis in vitro and against Heterakis spumosa or Nematospiroides dibius in mice. ADVANTAGE - The combination of (I) and (II) (both known ectoparasiticides) has synergistic action, due to potentiation of the activity of (II) by (I).

L12 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN AN 2000:587076 CAPLUS

DN 133:193492

Dwg.0/0

TI Preparation of cyclopeptides or cyclic depsipeptides as antifungal agents

- IN Barett, David; Tanaka, Akira; Okitsu, Osamu; Harada, Keiko; Ohki, Hidenori; Yamanaka, Hideaki; Kawabata, Koji
- PA Fujisawa Pharmaceutical Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 300 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 2000229998 A2 20000822 JP 1999-301639 19991022

PRAI JP 1998-368524 A 19981208

OS MARPAT 133:193492

- AB The title compds. [I; R1 = H, alkyl, lower alkoxyalkyl, CO2H, (un) substituted CONH2, aryl, lower (ar) alkyl, or heterocyclic carbonyl; R2 = (un)protected CO2H, (un)substituted heterocyclic carbonyl, (un) substituted NH2, N+(R5)3.X-; wherein R5 = (un) substituted lower alkyl or alkenyl; X = acid residue; R11 = HO, (un)substituted lower alkoxy; R12 = H, halo; R13 = H, NO2, NH2, acylamino; or R11 and R13 are bonded together to form O-CONH or -O-C-CONH; R14 = cyano, (un)substituted CONH2, (un)protected lower aminoalkyl; Z = O, NH, alkyl-N; P = (CH2)n; n = 0,1], which inhibit the biosynthesis of .alpha.-1,3-glucan and are useful for the treatment or prevention of bacterial infection, e.g. pneumonia caused by Pneumocystis carinii, are prepd. Thus, I.HCl (R1 = tridecyl, R2-A = H2N(CH2)3, R11 = OH, R12 = R13 = H, R14 = H2NCO, P = CH2, Z = O) was condensed with Et formimidate hydrochloride in the presence of diisopropylethylamine in DMF at room temp. for 4 days to give I.HCl [R2-A = NH:CHNH(CH2)3; R1, R2, R11, R12, R13, R14, P, Z = same as above] which showed min. inhibitory concn. of 0.20 .mu.g/mL against Candida albicans (FP633).
- L12 ANSWER 5 OF 7 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN DUPLICATE 2
- AN 2001:32913 BIOSIS
- DN PREV200100032913
- TI Synergistic action of a cyclic depsipeptide and piperazine on nematodes.
- AU Nicolay, Frank; Harder, Achim (1); von Samson-Himmelstjerna, Georg; Mehlhorn, Heinz
- CS (1) Business Group Animal Health, Research and Development, Bayer AG, 51368, Leverkusen: achim.harder.ah@bayer-ag.de Germany
- SO Parasitology Research, (December, 2000) Vol. 86, No. 12, pp. 982-992. print. ISSN: 0932-0113.

155N: 055

- DT Article LA English
- SL English
- AB The present study describes the synergistic effects of the cyclic depsipeptide BAY 44-4400 and piperazine in the treatment against the nematodes Trichinella spiralis, Heligmosomoides polygyrus, and Heterakis spumosa. The in vitro anthelmintic activity of a combination of the two compounds (1.7 motility units) against T. spiralis larvae was significantly higher than the sum of the individual drug effects (1.3 motility units). With regard to the rate of expulsion of H. polygyrus worms from the intestine of infected mice, an additive effect was observed; piperazine alone exerted an efficacy of 54.4% and BAY 44-4400 alone, one of 44.4%, whereas the combination of these compounds had an efficacy of 97.5%. With regard to the expulsion of H. spumosa worms, the effect of the combination was more than 5 orders of magnitude greater than the sum of the effects of the single compounds, i.e., there was a considerable potentiation of the actions of BAY 44-4400 and piperazine. Moreover, the combination exerted a significantly higher degree of degenerative effects on the intestine and on the nerve

chords of H. spumosa as compared with the single compounds.

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ANSWER 6 OF 7 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
L12
AN
     2000027028 EMBASE
     Enantioselective synthesis of protected forms of (3R,5R)-5-
ΤI
     hydroxypiperazic acid useful for synthesis.
     Depew K.M.; Kamenecka T.M.; Danishefsky S.J.
ΑU
     K.M. Depew, Laboratory for Bioorganic Chemistry, Sloan-Kettering Inst. for
CS
     Can. Res., 1275 York Avenue, New York, NY 10021, United States
SO
     Tetrahedron Letters, (15 Jan 2000) 41/3 (289-292).
     ISSN: 0040-4039 CODEN: TELEAY
PUI S 0040-4039(99)01958-9
    United Kingdom
CY
DT
     Journal; Article
FS
             Clinical Biochemistry
     029
LΑ
     English
\operatorname{SL}
     English
AΒ
     Protected versions of (3R,5R)-5-hydroxypiperazic acid were synthesized
     enantioselectively in two novel ways. The first derives its chirality from
     D- glutamic acid while the second uses an Evans amination and a
     diastereoselective bromolactonization to establish the two chiral centers.
     Given that this amino acid is a component of several depsipeptides, these
     two routes enable the synthesis of multigram quantities of protected
     versions of 2.
L12 ANSWER 7 OF 7 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN
     2000:364874 BIOSIS
DN
     PREV200000364874
TI
     The effect of the cyclic depsipeptide Bay 44-44 is
     synergistically enhanced by the GABA agonist piperazine -
     indicating a new neuropharmacological action.
     von Samson-Himmelstjerna, G. (1); Nicolay, F.; Harder, A. (1); Mehlhorn,
ΑU
CS
     (1) Bayer AG, Leverkusen Germany
     European Journal of Neuroscience, (2000) Vol. 12, No. Supplement 11, pp.
SO
     43. print.
     Meeting Info.: Meeting of the Federation of European Neuroscience
     Societies Brighton, UK June 24-28, 2000
     ISSN: 0953-816X.
DT
     Conference
     English
LΑ
SL
     English
=> s endoparasit? and depsipeptide
            33 ENDOPARASIT? AND DEPSIPEPTIDE
L13
=> s 113 and synerg?
L14
             4 L13 AND SYNERG?
=> d bib ab 1-4
L14 ANSWER 1 OF 4 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AN
     2001-041784 [06]
                        WPIDS
DNC C2001-012205
     Synergistic ectoparasiticide combination for use in human or
     veterinary medicine, comprising cyclic depsipeptide and
     piperazine compound as potentiating agent.
DC
     B03 C02
     HARDER, A; SAMSON-HIMMELSTJERNA, G; VON SAMSON-HIMMELSTJERNA, G
IN
PA
     (FARB) BAYER AG
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CYC 93

PΙ DE 19921887 A1 20001116 (200106)\* 15p WO 2000069425 A2 20001123 (200106) DE RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW AU 2000055237 A 20001205 (200113) BR 2000010499 A 20020213 (200220) NO 2001005398 A 20011105 (200222) SK 2001001626 A3 20020305 (200225) EP 1189615 A2 20020327 (200229) DE R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI KR 2001109527 A 20011210 (200237) CZ 2001004060 A3 20020612 (200251) A 20020605 (200261) HU 2002001201 A2 20020828 (200264) ZA 2001008238 A 20021224 (200309) 51p JP 2002544224 W 20021224 (200313) 46p ADT DE 19921887 A1 DE 1999-19921887 19990512; WO 2000069425 A2 WO 2000-EP4014 20000504; AU 2000055237 A AU 2000-55237 20000504; BR 2000010499 A BR 2000-10499 20000504, WO 2000-EP4014 20000504; NO 2001005398 A WO 2000-EP4014 20000504, NO 2001-5398 20011105; SK 2001001626 A3 WO 2000-EP4014 20000504, SK 2001-1626 20000504; EP 1189615 A2 EP 2000-940235 20000504, WO 2000-EP4014 20000504; KR 2001109527 A KR 2001-713555 20011023; CZ 2001004060 A3 WO 2000-EP4014 20000504, CZ 2001-4060 20000504; CN 1352559 A CN 2000-807450 20000504; HU 2002001201 A2 WO 2000-EP4014 20000504, HU 2002-1201 20000504; ZA 2001008238 A ZA 2001-8238 20011008; JP 2002544224 W JP 2000-617884 20000504, WO 2000-EP4014 20000504 FDT AU 2000055237 A Based on WO 200069425; BR 2000010499 A Based on WO 200069425; SK 2001001626 A3 Based on WO 200069425; EP 1189615 A2 Based on WO 200069425; CZ 2001004060 A3 Based on WO 200069425; HU 2002001201 A2 Based on WO 200069425; JP 2002544224 W Based on WO 200069425 PRAI DE 1999-19921887 19990512 AB DE 19921887 A UPAB: 20021105 NOVELTY - The use of piperazine derivatives (I) is claimed for potentiating the endoparasitic activity of cyclic depsipeptides (II), consisting of aminoacids and hydroxycarboxylic acids as ring components and having 24 ring atoms. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for: (i) endoparasitic compositions containing (I) and (II); and (ii) the use of (I) together with (II) for the preparation of endoparasitic compositions. ACTIVITY - Anthelmintic. In tests against Heterakis spumosa in mice, piperazine (Ia) at 4 x 250 mg/kg alone or 'depsipeptide I' (IIa) (see WO9325543) at 4 imes1 mg/kg alone gave 50-75% worm reduction, whereas a combination of (Ia) at  $4 \times 250 \text{ mg/kg}$  and (IIa) at  $4 \times 1 \text{ mg/kg}$  gave complete (more than 90%) worm reduction. MECHANISM OF ACTION - None given.

USE - The combinations of (I) and (II) are useful in human or veterinary medicine for controlling pathogenic **endoparasites**, specifically cestodes, trematodes, nematodes or acanthocephalae. Activity is demonstrated in tests against Trichinella spiralis in vitro and against Heterakis spumosa or Nematospiroides dibius in mice.

ADVANTAGE - The combination of (I) and (II) (both known ectoparasiticides) has synergistic action, due to potentiation of the activity of (II) by (I). Dwg.0/0

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1997-034097 [03]
                        WPIDS
AN
DNC
    C1997-010612
     Synergistic endo-parasitic agent, e.g. for treatment of domestic
TI
          - contains macrocyclic lactone, e.g. avermectin, cyclic-
     depsipeptide and opt. praciquantil or epsiprantel.
DC
     B03 C02
IN
     HARDER, A; HELPAP, B; JESCHKE, P; MENCKE, N; KOELBL, B
PΑ
     (FARB) BAYER AG
CYC
     45
PΙ
    WO 9638165
                  A2 19961205 (199703)* DE
                                              35p
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            US
     DE 19520275
                  A1 19961205 (199704)
                                              18p
    WO 9638165
                  A3 19970109 (199713)
     AU 9659004
                  A 19961218 (199714)
     ZA 9604473
                  A 19970430 (199723)
                                              35p
     NO 9705516
                  A 19980106 (199812)
     EP 828506
                  A2 19980318 (199815)
                                         _{
m DE}
         R: AT BE CH DE DK ES FI FR GB GR IE IT LI NL PT SE
     CZ 9703825
                  A3 19980318 (199817)
                  A3 19980708 (199836)
     SK 9701599
    NZ 309073
                  A 19981223 (199906)
                  A 19981227 (199907)
     IL 118518
     AU 703048
                  B 19990311 (199922)
     HU 9900346
                  A2 19990628 (199931)
     JP 11506438
                  W 19990608 (199933)
                                              39p
                  Α
     BR 9608961
                      19990629 (199937)
     MX 9709245
                  A1 19980301 (200002)
     KR 99022094
                  A 19990325 (200023)
     CZ 287290
                  B6 20001011 (200060)
     US 6159932
                  A 20001212 (200067)
     EP 828506
                  B1 20020227 (200215)
                                         DE
         R: AT BE CH DE DK ES FI FR GB GR IE IT LI NL PT SE
     DE 59608798 G 20020404 (200225)
     TW 469133
                  A 20011221 (200254)
     CN 1191489
                   A 19980826 (200275)
                   T3 20021016 (200279)
     ES 2173284
ADT
    WO 9638165 A2 WO 1996-EP2170 19960520; DE 19520275 A1 DE 1995-19520275
     19950602; WO 9638165 A3 WO 1996-EP2170 19960520; AU 9659004 A AU
     1996-59004 19960520; ZA 9604473 A ZA 1996-4473 19960531; NO 9705516 A WO
     1996-EP2170 19960520, NO 1997-5516 19971201; EP 828506 A2 EP 1996-916137
     19960520, WO 1996-EP2170 19960520; CZ 9703825 A3 WO 1996-EP2170 19960520,
     CZ 1997-3825 19960520; SK 9701599 A3 WO 1996-EP2170 19960520, SK 1997-1599
     19960520; NZ 309073 A NZ 1996-309073 19960520, WO 1996-EP2170 19960520; IL
     118518 A IL 1996-118518 19960531; AU 703048 B AU 1996-59004 19960520; HU
     9900346 A2 WO 1996-EP2170 19960520, HU 1999-346 19960520; JP 11506438 W JP
     1996-536146 19960520, WO 1996-EP2170 19960520; BR 9608961 A BR 1996-8961
     199.60520, WO 1996-EP2170 19960520; MX 9709245 A1 MX 1997-9245 19971128; KR
     99022094 A WO 1996-EP2170 19960520, KR 1997-708573 19971128; CZ 287290 B6
     WO 1996-EP2170 19960520, CZ 1997-3825 19960520; US 6159932 A WO
     1996-EP2170 19960520, US 1997-952356 19971119; EP 828506 B1 EP 1996-916137
     19960520, WO 1996-EP2170 19960520; DE 59608798 G DE 1996-508798 19960520,
     EP 1996-916137 19960520, WO 1996-EP2170 19960520; TW 469133 A TW
     1996-105513 19960510; CN 1191489 A CN 1996-195661 19960520; ES 2173284 T3
     EP 1996-916137 19960520
FDT
    AU 9659004 A Based on WO 9638165; EP 828506 A2 Based on WO 9638165; CZ
     9703825 A3 Based on WO 9638165; NZ 309073 A Based on WO 9638165; AU 703048
     B Previous Publ. AU 9659004, Based on WO 9638165; HU 9900346 A2 Based on
    WO 9638165; JP 11506438 W Based on WO 9638165; BR 9608961 A Based on WO
     9638165; KR 99022094 A Based on WO 9638165; CZ 287290 B6 Previous Publ. CZ
     9703825, Based on WO 9638165; US 6159932 A Based on WO 9638165; EP 828506
     B1 Based on WO 9638165; DE 59608798 G Based on EP 828506, Based on WO
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PRAI DE 1995-19520275 19950602 9638165 A UPAB: 19970212 AΒ Endoparasitic agent comprises: a) at least one avermectin, ivermectin (22,23-dihydro-avermectin B1) or milbemycin macrocyclic lactone; b) a cyclic depsipeptide comprising amino acid and hydroxycarboxylic acid units and contg. 6-30 ring atoms; and opt. c) praziquantil or epsiprantel. USE - The agent is useful for the treatment and prophylaxis of endoparasite infestations caused by filaria, cestodes, trematodes, nematodes and acantocephales in human beings and animals, including birds, fish and insects, eg. bees and silkworms. ADVANTAGE - (a) and (b) exert a synergistic effect, which results in economical and ecological benefits as a result of a lower dosage regimen. Further, the agent is more effective than prior art agents, esp. in the control of nematodes which affect dogs and cats, partic. Dirofilaria immitis. Dwg.0/0 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN 2000:807726 CAPLUS AN DN 133:359221 TIPiperazines for enhancement of cyclic depsipeptide endoparasiticides ΙN Harder, Achim; Von Samson-Himmelstjerna, Georg PABayer A.-G., Germany SO Ger. Offen., 16 pp. CODEN: GWXXBX DT Patent LΑ German FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE --------------DE 19921887 A1 20001116 PΙ DE 1999-19921887 19990512 WO 2000069425 A2 A3 WO 2000-EP4014 20000504 20001123 WO 2000069425 20010315 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG BR 2000-10499 BR 2000010499 20020213 20000504 Α EP 1189615 EP 2000-940235 20000504 A2 20020327 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO JP 2002544224 T2 20021224 JP 2000-617884 20000504 NO 2001005398 NO 2001-5398 Α 20011105 20011105 HR 2001-918 HR 2001000918 A1 20030430 20011211 PRAI DE 1999-19921887 A 19990512 WO 2000-EP4014 W 20000504 AB The invention discloses the use of piperazines to increase the endoparasiticidal effect of cyclic depsipeptides (having amino acids and hydroxy acids as ring components and with 24 ring atoms) for endoparasiticidal medicaments. L14 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN AN 1997:51502 CAPLUS DN 126:84585 ΤI Endoparasitic drug combination

9638165; ES 2173284 T3 Based on EP 828506

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Mencke, Norbert; Harder, Achim; Jeschke, Peter; Helpap, Barbara
IN
PΑ
     Bayer A.-G., Germany
SO
     Ger. Offen., 17 pp.
     CODEN: GWXXBX
DT
     Patent
LΑ
     German
FAN.CNT 1
                                              APPLICATION NO. DATE
     PATENT NO. KIND DATE
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                                             DE 1995-19520275 19950602
TW 1996-85105513 19960510
     DE 19520275 A1 19961205
TW 469133 B 20011221
CA 2222680 AA 19961205
ΡI
     CA 2222680
                        AA 19961205
                                               CA 1996-2222680 19960520
                        A2 19961205
                                               WO 1996-EP2170 19960520
     WO 9638165
     WO 9638165
                        A3 19970109
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              PL, RO, RU, SK, TR, UA, US
          RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
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                                                                  19960520
     AU 703048
                         B2
                              19990311
                                               EP 1996-916137 19960520
     EP 828506
                         A2
                               19980318
                        B1 20020227
     EP 828506
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI
                  A 19980826
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                                                                    19960520
     BR 9608961
                         Α
                               19990629
                                                BR 1996-8961
                                                                    19960520
     BR 9608961 A 19990629 BR 1996-8961 19960520 CZ 287290 B6 20001011 CZ 1997-3825 19960520 AT 213645 E 20020315 AT 1996-916137 19960520 ES 2173284 T3 20021016 ES 1996-916137 19960520 PL 184848 B1 20021231 PL 1996-323595 19960520 IL 118518 A1 19981227 IL 1996-118518 19960531 US 6159932 A 20001212 US 1997-952356 19971119 NO 9705516 A 19980106 NO 1997-5516 19971201 DE 1995-19520275 A 19950602
PRAI DE 1995-19520275 A 19950602
     WO 1996-EP2170 W 19960520
OS
     MARPAT 126:84585
     A combination of a macrocyclic lactone (avermectin, ivermectin, or
AB
     milbemycin) with a cyclic depsipeptide, optionally including
     praziquantel or epsiprantel, is useful as a synergistic
     nematocide for treatment of ascarid, hookworm, trichurid, and filarial
     infestations in mammals. Thus, a combination of PF 1022A (cyclic
     depsipeptide) 50.0 and ivermectin Bla/Blb 0.1 mg/kg orally was
     100% effective against Nematospiroides dubius infestation in mice.
=> s parasit? and drug (5a) combin?
           5459 PARASIT? AND DRUG (5A) COMBIN?
=> s 115 and synerg?
L16
          467 L15 AND SYNERG?
=> s 116 and (piperazine? or depsipeptid?
UNMATCHED LEFT PARENTHESIS 'AND (PIPERAZINE'
The number of right parentheses in a query must be equal to the
number of left parentheses.
=> s 116 and (piperazine? or depsipeptid?)
L17
              6 L16 AND (PIPERAZINE? OR DEPSIPEPTID?)
=> dup rem 117
PROCESSING COMPLETED FOR L17
L18
               5 DUP REM L17 (1 DUPLICATE REMOVED)
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ANSWER 1 OF 5 CABA COPYRIGHT 2003 CABI on STN
L18
     2001:31654 CABA
AN
DN
     20003026922
ΤI
     Synergistic action of a cyclic depsipeptide and
     piperazine on nematodes
     Nicolay, F.; Harder, A.; Samson-Himmelstjerna, G. von; Mehlhorn, H.; von
ΑU
     Samson-Himmelstjerna, G.
CS
     Institute of Zoomorphology, Cell Biology and Parasitology,
     Heinrich-Heine-University Dusseldorf, Universitatsstrasse 1, 40225
     Dusseldorf, Germany.
SO
     Parasitology Research, (2000) Vol. 86, No. 12, pp. 982-992. 17 ref.
     ISSN: 0932-0113
DT
     Journal
LΑ
     English
AB
     The synergistic effects of the cyclic depsipeptide BAY
     44-4400 and piperazine in the treatment of Trichinella spiralis,
     Heligmosomoides polygyrus and Heterakis spumosa infections in mice were
     investigated. The in vitro anthelmintic activity of a combination of the 2
     compounds (1.7 motility units) against T. spiralis larvae was
     significantly higher than the sum of the individual drug effects (1.3
     motility units). With regard to the rate of expulsion of H. polygyrus
     worms from the intestine of infected mice, an additive effect was
     observed; piperazine and BAY 44-4400 alone exerted individual
     efficacies of 54.4 and 44.4%, respectively, whereas the combination of
     both compounds had an efficacy of 97.5%. With regard to the expulsion of
     H. spumosa worms, the effect of the combination was more than 5 orders of
     magnitude greater than the sum of the effects of the individual compounds,
     showing that there was a considerable potentiation of the actions of BAY
     44-4400 and piperazine. The drug combination
     exerted a significantly higher degree of degenerative effects on the
     intestine and on the nerve cords of H. spumosa, compared with the
     individual compounds.
L18
    ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
     1998:147346 CAPLUS
AN
DN
     128:213381
     Compositions and methods for treating infections using analogs of
TI
     indolicidin
ΤN
     Fraser, Janet R.; West, Michael H. P.; Krieger, Timothy J.; Taylor,
     Robert; Erfle, Douglas
     Micrologix Biotech, Inc., Can.; Fraser, Janet R.; West, Michael H. P.;
PA
     Krieger, Timothy J.; Taylor, Robert; Erfle, Douglas
SO
     PCT Int. Appl., 130 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 3
     PATENT NO.
                     KIND DATE
                                           APPLICATION NO. DATE
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                                           WO 1997-US14779 19970821
                            19980709
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             LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN,
             YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
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19970821

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    ES 2178000
                     Т3
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                                        ES 1997-941352
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PRAI US 1996-24754P
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                          19960821
    US 1997-34949P
                    P
                          19970113
                     A3
    EP 1997-941352
                        19970821
    WO 1997-US14779 W
                          19970821
OS
    MARPAT 128:213381
AB
    Compns. and methods for treating infections, esp. bacterial infections,
    are provided. Indolicidin peptide analogs contg. at least two basic amino
    acids are prepd. The analogs are administered as modified peptides,
    preferably contg. photo-oxidized solubilizer.
L18 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
AN
    1997:51502 CAPLUS
DN
    126:84585
TI
    Endoparasitic drug combination
IN
    Mencke, Norbert; Harder, Achim; Jeschke, Peter; Helpap, Barbara
PA
    Bayer A.-G., Germany
SO
    Ger. Offen., 17 pp.
    CODEN: GWXXBX
DT
    Patent
LΑ
    German
FAN.CNT 1
    PATENT NO.
                KIND DATE
                                        APPLICATION NO. DATE
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    TW 469133
                    B 20011221
                                       TW 1996-85105513 19960510
                    AA 19961205
    CA 2222680
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    WO 9638165
                    A2 19961205
                                        WO 1996-EP2170 19960520
    WO 9638165
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            PL, RO, RU, SK, TR, UA, US
        RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
            SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
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    EP 828506
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                                        EP 1996-916137 19960520
                          19980318
    EP 828506
                     В1
                          20020227
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI
    CN 1191489
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                                       CN 1996-195661
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                                        JP 1996-536146
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    CZ 287290
                    B6 20001011
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                    A 20001212
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PRAI DE 1995-19520275 A 19950602
    WO 1996-EP2170 W
                          19960520
OS
    MARPAT 126:84585
AB
    A combination of a macrocyclic lactone (avermectin, ivermectin, or
    milbemycin) with a cyclic depsipeptide, optionally including
```

praziquantel or epsiprantel, is useful as a synergistic

nematocide for treatment of ascarid, hookworm, trichurid, and filarial infestations in mammals. Thus, a combination of PF 1022A (cyclic depsipeptide) 50.0 and ivermectin Bla/Blb 0.1 mg/kg orally was 100% effective against Nematospiroides dubius infestation in mice.

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L18 ANSWER 4 OF 5 CABA COPYRIGHT 2003 CABI on STN
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- AN 91:83681 CABA
- DN 912227873
- TI Efficacy of anthelmintics against mixed helminth infections in fowls
- AU Hadykto, M. V.; Kulik, O. M.
- CS Vsesoyuznyi Institut Vetpreparatov, Moscow, USSR.
- SO Veterinariya (Moskva), (1991) No. 3, pp. 43-46. 12 ref. ISSN: 0042-4846
- DT Journal
- LA Russian
- SL English
- AB In 200 hens carrying Ascaridia galli and Heterakis gallinae, the combined use of levamisole at 15 mg a head and piperazine at 150 mg a head, given on two consecutive days, had a synergic action. In 100 hens carying Ascaridia galli and unspecified cestodes, levamisole at 40 mg enhanced the cestocidal action of niclosamide at 200 mg a head.
- L18 ANSWER 5 OF 5 MEDLINE ON STN DUPLICATE 1
- AN 78122168
- DN 78122168 PubMed ID: 629460
- TI Anthelmintic efficacy of thenium closylate-piperazine phosphate combination tablets against Toxocara canis in pups and young dogs.
- AU Corwin R M; Miller T A
- SO AMERICAN JOURNAL OF VETERINARY RESEARCH, (1978 Feb) 39 (2) 263-5. Journal code: 0375011. ISSN: 0002-9645.
- CY United States
- DT Journal; Article; (JOURNAL ARTICLE)

MEDLINE

- LA English
- FS Priority Journals
- EM 197804
- ED Entered STN: 19900314

Last Updated on STN: 19900314

Entered Medline: 19780426

- AΒ Thenium closylate-piperazine phosphate combination tablets, tablets containing either thenium or piperazine, and control tablets (excipients only) were administered in 2 doses 5 to 7.5 hours apart to weaned pups and young dogs, in critical controlled trials to test efficacy against naturally acquired infections of Toxocara canis. In the 1st trial, the combination tablets produced a mean clearance of 94% from 18 pups. Tablets containing thenium alone showed a mean clearance of 9% from 25 pups, and tablets containing piperazine alone caused a mean clearance of 56% from 16 pups. Clearances, corrected for spontaneous worm losses observed in pups treated with the control tablets, were 90% (combination), 5% (thenium alone), and 52% (piperazine alone). In the 2nd and 3rd trials, efficacy of the combination tablet in 15 pups was 78% when corrected for worm losses in pups which had received placebo (excipient) tablets. Each component in the combination tablet contributed its full single-entity efficacy and, if in combination, synergistic effect between the components.
- => file biosis medline agricola embase caba wpids japio biotechds lifesci caplus COST IN U.S. DOLLARS

  SINCE FILE TOTAL
  ENTRY SESSION
  FULL ESTIMATED COST

  185.40
  185.61

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL
ENTRY SESSION

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=> s bay 44-4400 L19 18 BAY 44-4400

=> dup rem 119

PROCESSING COMPLETED FOR L19 L20 4 DUP REM L19 (14 DUPLICATES REMOVED)

=> d bib ab 1-4

- L20 ANSWER 1 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN DUPLICATE 1
- AN 2001:555185 BIOSIS
- DN PREV200100555185
- TI Filaricidal efficacy of anthelmintically active cyclodepsipeptides.
- AU Zahner, Horst (1); Taubert, Anja; Harder, Achim; von Samson-Himmelstjerna, Georg
- CS (1) Institute for Parasitology, Justus Liebig University Giessen, Rudolf-Buchheim-Strasse 2, D-35392, Giessen: horst.zahner@vetmed.uni-giessen.de Germany
- SO International Journal for Parasitology, (November, 2001) Vol. 31, No. 13, pp. 1515-1522. print. ISSN: 0020-7519.
- DT Article
- LA English
- SL English
- AB PF 1022A, a novel anthelmintically active cyclodepsipeptide, and Bay 44-4400, a semisynthetic derivative of PF 1022A were tested for filaricidal efficacy in Mastomys coucha infected with Litomosoides sigmodontis, Acanthocheilonema viteae and Brugia malayi. The parent compound PF 1022A showed limited anti-filarial efficacy in L.

sigmodontis and B. malayi infected animals. Oral doses of 5X100 mg/kg on consecutive days caused only a temporary decrease of microfilariaemia levels. By contrast, Bay 44-4400 was highly effective against microfilariae of all three species in single oral, subcutaneous and cutaneously applied (spot on) doses. Minimum effective doses (MED, reducing parasitaemia density by gtoreq95%) determined 3 and 7 days after treatment were 3.125-6.25 and 6.25-12.5 mg/kg, respectively. Using the spot on formulation, doses of 6.25 mg/kg (L. sigmodontis), 12.5 mg/kg (A. viteae) and 25 mg/kg (B. malayi) were required to cause reductions of microfilaraemia levels by gtoreq95% until day 56. Adulticidal effects, determined as minimum curative doses (MCD, eliminating adult parasites within 56 days by >95%) after single dose treatment were limited to A. viteae (MCD, 100 mg/kg independent of the route of administration). Repeated oral treatment (100 mg/kg on 5 consecutive days) killed all adult L. sigmodontis but did not affect B. malayi. However, single doses of 6.25 and 25 mg/kg resulted in severe pathological alterations of intrauterine stages of L. sigmodontis and B. malayi, respectively. These alterations may be responsible for long-lasting reductions of microfilaraemia even when curative effects could not be achieved.

- L20 ANSWER 2 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN DUPLICATE 2
- AN 2002:271147 BIOSIS
- DN PREV200200271147
- TI Activity of the cyclic depsipeptide emodepside (BAY 44 -4400) against larval and adult stages of nematodes in rodents and the influence on worm survival.
- AU Harder, Achim (1); von Samson-Himmelstjerna, Georg
- CS (1) Business Group Animal Health, Research and Development, Biological Chemical Evaluation, Bayer AG, Alfred-Nobel-Strasse 50, 40789, Monheim: achim.harder.ah@bayer-aq.de Germany
- SO Parasitology Research, (November, 2001) Vol. 87, No. 11, pp. 924-928. print.

  ISSN: 0932-0113.
- DT Article
- LA English
- The present investigations deal with the activity of the cyclic depsipeptide emodepside (BAY 44-4400) against larval and adult stages of three rodent nematodes. While emodepside acts strongly against the adult stages of the rat nematodes Nippostrongylus brasiliensis and Strongyloides ratti, as well as against the mouse nematode Heligmosomoides polygyrus, its actions against the larval stages of these nematodes vary according to the species. Thus, emodepside is highly effective against the lung and intestine larval stages of N. brasiliensis and S. ratti. By contrast, the larval stages of H. polygyrus in the intestine are only partly affected by higher emodepside dosages.
- L20 ANSWER 3 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN DUPLICATE 3
- AN 2001:478778 BIOSIS
- DN PREV200100478778
- TI Effects of Bay 44-4400, a new cyclodepsipeptide, on developing stages of filariae (Acanthocheilonema viteae, Brugia malayi, Litomosoides sigmodontis) in the rodent Mastomys coucha.
- AU Zahner, H. (1); Taubert, Anja; Harder, Achim; von Samson-Himmelstjerna, Georg
- CS (1) Institute of Parasitology, Justus Liebig University Giessen, Rudolf-Buchheim-Strasse 2, D-35392, Giessen: horst.zahner@vetmed.uni-giessen.de Germany
- SO Acta Tropica, (1 September, 2001) Vol. 80, No. 1, pp. 19-28. print.

ISSN: 0001-706X.

- DTArticle
- LΑ English
- $\operatorname{SL}$ English
- AB Bay 44-4400 was used as a spot on

formulation and administered in single doses of 25 and 100 mg/kg to Acanthocheilonema viteae, Bruqia malayi, and Litomosoides sigmodontis infected Mastomys coucha on various dates during prepatency, aiming to affect third stage larvae, fourth stage larvae or preadult worms. Microfilaraemia levels were controlled in comparison to untreated controls until necropsies were performed 100 days p.i. (A. viteae, L. sigmodontis) and 150 days p.i. (B. malayi) to determine the numbers of surviving worms and the condition of intrauterine developing stages. A significant proportion (86-100%) of larval and preadult stages of A. viteae were killed by Bay 44-4400 at a dose of 100 mg/kg. A dose of 25 mg/kg had only insignificant effects on the developing parasites, however, it strongly reduced microfilaraemia levels caused by surviving worms in the early phase of patency. Larval and preadult B. malayi and L. sigmodontis were not killed by Bay 44-4400 to a significant degree. Microfilaraemia developing by surviving parasites was generally and significantly reduced throughout the observation period when treatment was performed to affect the preadult parasites. In the other cases variable results were obtained. Intrauterine early embryonic stages were found to be pathologically altered in worms

L20 ANSWER 4 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN DUPLICATE 4

which had been treated at a preadult stage.

- 2001:32913 BIOSIS ΑN
- PREV200100032913 DN
- Synergistic action of a cyclic depsipeptide and piperazine on nematodes. TI
- Nicolay, Frank; Harder, Achim (1); von Samson-Himmelstjerna, Georg; ΑU Mehlhorn, Heinz
- CS (1) Business Group Animal Health, Research and Development, Bayer AG, 51368, Leverkusen: achim.harder.ah@bayer-ag.de Germany
- SO Parasitology Research, (December, 2000) Vol. 86, No. 12, pp. 982-992. print.
  - ISSN: 0932-0113.
- DT Article
- English LΑ
- SLEnglish
- The present study describes the synergistic effects of the cyclic AΒ depsipeptide BAY 44-4400 and piperazine in the treatment against the nematodes Trichinella spiralis, Heligmosomoides polygyrus, and Heterakis spumosa. The in vitro anthelmintic activity of a combination of the two compounds (1.7 motility units) against T. spiralis larvae was significantly higher than the sum of the individual drug effects (1.3 motility units). With regard to the rate of expulsion of H. polygyrus worms from the intestine of infected mice, an additive effect was observed; piperazine alone exerted an efficacy of 54.4% and BAY 44-4400 alone, one of 44.4%, whereas the combination of these compounds had an efficacy of 97.5%. With regard to the expulsion of H. spumosa worms, the effect of the combination was more than 5 orders of magnitude greater than the sum of the effects of the single compounds, i.e., there was a considerable potentiation of the actions of BAY 44-4400 and piperazine. Moreover, the combination exerted a significantly higher degree of degenerative effects on the intestine and on the nerve chords of H. spumosa as compared with the single compounds.

The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

## => d his

(FILE 'HOME' ENTERED AT 15:41:55 ON 23 JUL 2003)

FILE 'BIOSIS, MEDLINE, AGRICOLA, EMBASE, CABA, WPIDS, JAPIO, BIOTECHDS, LIFESCI, CAPLUS' ENTERED AT 15:42:05 ON 23 JUL 2003

E HARDER ACHIM/AU 139 S E3 L1 E VON SAMSON-HIMMELSTJERNA GEORG/AU 2 S E4 L2E VON SAMSON GEORG/AU 149 S E2-E12 L3 T.4 2 S E23 L5 256 S L1-L4 62 S L5 AND ENDOPARASIT? L6 L7 55 DUP REM L6 (7 DUPLICATES REMOVED) 0 S L7 AND DEPSIDEPTIDE L814 S L7 AND DEPSIPEPTIDE L9 1 S L7 AND PIPERAZINE

L10 1 S L7 AND PIPERAZINE
L11 11 S DEPSIPEPTIDE AND PIPERAZINE

L12 7 DUP REM L11 (4 DUPLICATES REMOVED)
L13 33 S ENDOPARASIT? AND DEPSIPEPTIDE

L14 4 S L13 AND SYNERG?

L15 5459 S PARASIT? AND DRUG (5A) COMBIN?

L16 467 S L15 AND SYNERG?

L17 6 S L16 AND (PIPERAZINE? OR DEPSIPEPTID?)

L18 5 DUP REM L17 (1 DUPLICATE REMOVED)

FILE 'BIOSIS, MEDLINE, AGRICOLA, EMBASE, CABA, WPIDS, JAPIO, BIOTECHDS, LIFESCI, CAPLUS' ENTERED AT 16:09:00 ON 23 JUL 2003

L19 18 S BAY 44-4400

L20 4 DUP REM L19 (14 DUPLICATES REMOVED)

=> s 119 and piperazine

L21 4 L19 AND PIPERAZINE

# => d ti 1-4

L21 ANSWER 1 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN TI Synergistic action of a cyclic depsipeptide and piperazine on

nematodes.

- L21 ANSWER 2 OF 4 MEDLINE on STN
- TI Synergistic action of a cyclic depsipeptide and piperazine on nematodes.
- L21 ANSWER 3 OF 4 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V. on STN
- TI Synergistic action of a cyclic depsipeptide and piperazine on nematodes.
- L21 ANSWER 4 OF 4 CABA COPYRIGHT 2003 CABI on STN
- TI Synergistic action of a cyclic depsipeptide and piperazine on nematodes.

## => d bib ab

L21 ANSWER 1 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN AN 2001:32913 BIOSIS

- DN PREV200100032913
- TI Synergistic action of a cyclic depsipeptide and **piperazine** on nematodes.
- AU Nicolay, Frank; Harder, Achim (1); von Samson-Himmelstjerna, Georg; Mehlhorn, Heinz
- CS (1) Business Group Animal Health, Research and Development, Bayer AG, 51368, Leverkusen: achim.harder.ah@bayer-ag.de Germany
- SO Parasitology Research, (December, 2000) Vol. 86, No. 12, pp. 982-992. print.
  ISSN: 0932-0113.
- 1330. 0332-0
- DT Article
- LA English
- SL English
- AB The present study describes the synergistic effects of the cyclic depsipeptide BAY 44-4400 and

piperazine in the treatment against the nematodes Trichinella spiralis, Heligmosomoides polygyrus, and Heterakis spumosa. The in vitro anthelmintic activity of a combination of the two compounds (1.7 motility units) against T. spiralis larvae was significantly higher than the sum of the individual drug effects (1.3 motility units). With regard to the rate of expulsion of H. polygyrus worms from the intestine of infected mice, an additive effect was observed; piperazine alone exerted an

efficacy of 54.4% and **BAY 44-4400** alone, one of 44.4%, whereas the combination of these compounds had an efficacy of 97.5%. With regard to the expulsion of H. spumosa worms, the effect of the

combination was more than 5 orders of magnitude greater than the sum of the effects of the single compounds, i.e., there was a considerable potentiation of the actions of BAY 44-4400

and piperazine. Moreover, the combination exerted a significantly higher degree of degenerative effects on the intestine and on the nerve chords of H. spumosa as compared with the single compounds.

=> s pf1022a

L22 135 PF1022A

=> s 122 and piperazine

L23 0 L22 AND PIPERAZINE

=> s 122 and synerg?

L24 2 L22 AND SYNERG?

- => d bib ab 1-2
- L24 ANSWER 1 OF 2 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
- AN 1992:430273 BIOSIS
- DN BA94:82398
- TI NEUROPHARMACOLOGICAL MECHANISM OF ACTION OF **PF1022A** AN ANTINEMATODE ANTHELMINTIC WITH A NEW STRUCTURE OF CYCLIC DEPSIPEPTIDE ON ANGIOSTRONGYLUS-CANTONENSIS AND ISOLATED FROG RECTUS.
- AU TERADA M
- CS DEP. PARASITOL., HAMAMATSU UNIV. SCH. MED., 3600 HANDA-CHO, HAMAMATSU 431-31, JPN.
- SO JPN J PARASITOL, (1992) 41 (2), 108-117. CODEN: KISZAR. ISSN: 0021-5171.
- FS BA; OLD
- LA English
- AB Mechanism of action of PF1022A was studied neuropharmacologically. Against Angiostrongylus cantonensis, PF1022A inhibited the motility at such a low concentration as 10-13 g/ml, and paralyzed the worm at 10-12-10-6 g/ml. The paralysis by the drug at 10-12 g/ml was partially antagonized by gabergic antagonists like picrotoxin and bicuculline, and completely reversed when

N-methylcytisine (N-MC) was added with gabergic antagonists. On the other hand, in the preparations paralyzed by PF1022A (10-10 g/ml), the spasmogenic effects of N-MC and eserine were kept inhibited even with gabergic antagonists, while those of pyrantel were not inhibited. Paralysis by PF1022A (10-12 g/ml) was antagonized by Ca2+ combined with gabergic antagonists. The reversed motility by Ca2+ was again paralyzed by the addition of PF1022A (10-10 g/ml). The guanidine (2.5 .times. 10-3 M)-induced twitch response in the isolated frog rectus with or without N-MC was inhibited PF1022A (10-6 g/ml), while contraction by pyrantel was not inhibited in the paralyzed preparation. From these results, it is suggested that PF1022A affects neuropharmacologically the nematode and the frog rectus. And in A. cantonensis, the inhibition is produced synergistically by stimulating the gabergic mechanism and inhibiting the cholinergic mechanism. As the drug is extremely less toxic against host animals, it is quite likely that PF1022A becomes available as a superior antinematode drug.

- L24 ANSWER 2 OF 2 CABA COPYRIGHT 2003 CABI on STN
- AN 92:114744 CABA
- DN 920801081
- TI Neuropharmacological mechanism of action of Pf1022A, an antinematode anthelmintic with a new structure of cyclic depsipeptide, on Angiostrongylus cantonensis and isolated frog rectus
- AU Terada, M.
- CS Department of Parasitology, Hamamatsu University School of Medicine, 3600 Handa-cho, Hamamatsu 431-31, Japan.
- SO Japanese Journal of Parasitology, (1992) Vol. 41, No. 2, pp. 108-117. 25 ref.
- ISSN: 0021-5171
- DT Journal
- LA English

AΒ

The mechanism of action of PF1022A was studied neuropharmacologically. PF1022A inhibited motility in A. cantonensis at a concentration of 10-13 g/ml, and paralysed the worm at 10-12-10-6 g/ml. Paralysis by the drug at 10-12 g/ml was partially antagonized by gabergic antagonists like picrotoxin and bicuculline, and completely reversed when N-methylcytisine (N-MC) was added with gabergic antagonists. However in the preparations paralysed by PF1022A (10-10 g/ml), the spasmogenic effects of N-MC and eserine were kept inhibited even with gabergic antagonists, while those of pyrantel were not inhibited. Paralysis by PF1022A (10-12 g/ml) was antagonized by Ca2+ combined with gabergic antagonists. The reversed motility by Ca2+ was again paralysed by the addition of PF1022A (10-10 g/ml). The guanidine (2.5 x 10-13 M)-induced twitch response in the isolated frog rectus with or without N-MC was inhibited by PF1022A (10-6 g/ml), while contraction by pyrantel was not inhibited in the paralysed preparation. It is suggested that PF1022A affects neuropharmacologically the nematode and the frog rectus, and in A. cantonensis, the inhibition is produced synergistically by stimulating the gabergic mechanism and inhibiting the cholinergic mechanism. As the drug has a low toxicity against host animals it is thought likely that PF1022A will become available as a superior antinematode drug.